



BULLETIN

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DIRECTOR'S COLUMN

Henry L. Green

New School Inspection Law

Senate Bill 358 was signed into law as Act No. 628 on December 23, 2002. This amendatory law provides for the inspection of all school buildings under the Stille-DeRossett-Hale Single State Construction Code Act.

For over a decade, amendments in law have been pursued to require the review and inspection of school construction projects. With the enactment of this revision, school construction projects must be submitted for plan review and on-site inspections to the Department of Consumer and Industry Services.

The bureau is currently developing all required forms and processes for submission of plans and applications for permits. It is envisioned that design professionals and construction companies pursuing school construction projects will submit plans for these projects under a single application to the Department for review.

The Bureau of Construction Codes and the Office of Fire Safety are working to create a comprehensive coordinated system for submission of plans, timely inspection services and granting of approvals for completed construction.

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Model Roof Truss Design Criteria

by Larry Lehman, Chief
Building Division

In October 2002, building officials representing local enforcing agencies; the Wood Truss Council of Michigan; and structural engineering firms met to review attic live loading related to residential structures. Representatives of the Bureau of Construction Codes also participated in the discussion to provide an overview of the technical bulletin and to respond to questions posed in the meeting.

The 2000 Michigan Building Code (MBC), Table 1607.1, and the 2000 Michigan Residential Code (MRC), Table R301.4, state that an attic without storage shall be designed for a live load of 10 psf and an attic with storage shall be designed for a live load of 20 psf.

Both of the aforementioned Codes also require a flat or roof snow load based on the ground snow load map presented in both codes and modified in accordance with the ASCE-7. Although the MRC doesn't directly reference the ASCE-7, the November 2001 issue of the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes' Publication Number 42 entitled *Roof Design* clarifies that ASCE-7 shall be used to determine the design roof snow load.

The committee reviewed the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes' Technical Bulletin Number 42 entitled *Roof Design*, and the Michigan Department of Consumer and Industry Services, Bureau of Construction Codes' Technical Bulletin Number 44 entitled *Residential Attic Loads on Roof Trusses* and concluded the following: First, the committee agreed that the use of the *Roof Loading Data Sheet* included within Publication Number 42 is in the best interest of the builder, the owner, the municipality, the roof designer, and the building designer and therefore encourages its use. Second, the committee agreed with Publication Number 44 that the 20 psf attic storage load shall be applied only in areas intended for storage as clearly identified on the design documents and the *Roof Loading Data Sheet*. This is consistent with the language of the 2000 International Residential Code for One- and Two-Family Dwellings COMMENTARY. Last, the committee agreed that the minimum 10 psf attic live load shall be non-concurrent. It was agreed that the intent of the 10 psf attic live load is for construction loading and is not required to be applied concurrently with other transient live loads. This follows the requirement of the ANSI TPI-1-2002.

Questions may be directed to the Building Division at 517/241-9317.

Director's Column, continued...

The law also provides for inspection by local code enforcement agencies where the local school board and the local unit of government certify the local enforcing agency has full-time plan review and inspection staff and are otherwise qualified to perform these duties in the review and inspection of school buildings.

Additional information will be provided to local enforcing agencies, school districts, design professionals and construction contractors.

Inquiries concerning the submission of plans and the inspection of schools should be directed to Mark Sisco, Deputy Director, Bureau of Construction Codes at 517/241-9302.

Holiday Closing

State offices will be closed in observance of the following holiday:

February 17 - President's Day

The BULLETIN is a quarterly publication of the Bureau of Construction Codes within the Michigan Department of Consumer & Industry Services. The BULLETIN is published for the information of the 60,000 plumbers, electricians, mechanical contractors, boiler and elevator licensees, plan reviewers, building officials, inspector registrants, manufactured home communities, installer/servicers, and retailers throughout the state.

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Certified Premanufactured Units

by Irvin Poke, Chief
Plan Review Division

The Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230, section 19(1) states, "The commission shall promulgate rules establishing a procedure by which a premanufactured unit intended for use in this state may be issued a certificate of acceptability by the commission at its place of manufacture." Section 19(2) provides that such a unit when in compliance with local zoning laws and ordinances is subject only to nondestructive inspection by the local enforcing agency. It is important to note that the certificate of acceptability must be issued at the place of manufacture.

The Premanufactured Unit Rules, Part 11, prescribes the procedure for the certification of premanufactured units. Rule 1103(4) defines the Building System as "...plans, specifications, and documentation for a system of premanufactured units..." The Compliance Assurance Program is defined in Rule 1104(2) as "...the system, documentation, and methods of assuring that premanufactured units...conform to the act and these rules." Rule 1105(4) defines Label as "...an approved device or seal evidencing certification in accordance with the act and these rules." Therefore, the Label is the certificate of acceptability that is placed on the unit.

Pursuant to Rules 1132(1) & (2), each manufacturer is required to have an approved Compliance Assurance Program and Building System before a unit can be certified. Rule 1135 states that the Label is certification that the unit is in compliance with the approved Compliance Assurance Program and Building System. The Compliance Assurance Program for all manufacturers must outline the procedure for final inspection and labeling in the factory to satisfy Rule 1165(1).

If a unit arrives at a site without a Label there is no certification of its construction or inspection, and the manufacturer has violated the act and the rules; therefore, the unit is not certified in accordance with the act and does not have the protection from destructive inspection provided in the act. The local jurisdiction may then order the exposure of covered work to inspect for compliance with the code.

Questions may be directed to the Plan Review Division at 517/241-9328.

Requests For Plumbing Code Change Proposals

By Robert Konyndyk, Chief
Plumbing Division

The Bureau's Plumbing Division has started the 2003 code rule development cycle with the first committee meeting last month. Individuals wishing to submit code change proposals are encouraged to use the form available on the Bureau's web site. The code review committee meetings are scheduled for conclusion the middle of April.

The division has made significant progress in addressing code concerns on a national level to promote construction uniformity throughout the country. Individuals and organizations desiring extensive product and engineering changes should submit proposals for review to the International Code Council at www.intlcode.org.

Questions may be directed to the Plumbing Division at 517/241-9330.

2002-2006 Inspector Registration Cycle Underway

by Scott D. Fisher, Director
Office of Local Government and Consumer Services

Due to changes in the Stille-DeRossett-Hale Single State Construction Code Act and the implementation of the statewide codes, the 2002 registration cycle is for a period of four years, rather than the customary three-year period.

The four-year cycle allows an additional year to achieve continuing education requirements; however, it also requires individuals to achieve additional credit hours on a pro-rated basis for the additional year. In order to assure completion of credit hours, please follow these helpful hints:

1. Set a date for completion of educational requirements several months prior to the expiration of your registration. This helps avoid the last minute rush to get hours during the busy summer months.

2. Keep a record of all courses taken. Include the program name, the program number, type of credits, number of hours, the instructors name, and date of the program.

3. Compare your records to the credit statements sent to you periodically throughout the cycle.

4. If you do not receive your renewal in the mail by the middle of August of the last year of the cycle, contact this office immediately.

Please remember, before a registration renewal application is processed, the required hours must be achieved and the completed renewal application received in this office.

Questions may be directed to the Office of Local Government and Consumer Services at 517/241-9347.

Online Permitting

Online permitting via the Internet is now available for electrical and mechanical contractors and authorized master plumbers. For additional information, visit us at www.michigan.gov/bcc.

Scheduled Board Meetings

MEETING	DATE	TIME	LOCATION
Electrical Administrative Board	Feb. 07	9:30 a.m.	Okemos-Conf. Room 1
Board of Mechanical Rules	Feb. 26	9:00 a.m.	Okemos-Conf. Room 3
Construction Code Commission	Mar. 05	9:30 a.m.	Okemos-Conf. Room 3
Board of Boiler Rules	Mar. 11	9:30 a.m.	Okemos-Conf. Room 1
Manufactured Housing Commission	Mar. 12	10:00 a.m.	Okemos-Conf. Room 1
Barrier Free Design Board	Mar. 14	9:30 a.m.	Okemos-Suite 116 CR
State Plumbing Board	Mar. 25	10:00 a.m.	Okemos-Conf. Room 2
Electrical Administrative Board	Apr. 04	9:30 a.m.	Okemos-Suite 116 CR
Board of Mechanical Rules	Apr. 23	9:00 a.m.	Okemos-Conf. Room 3
State Plumbing Board	Apr. 23	10:00 a.m.	Okemos-Conf. Room 2
Manufactured Housing Commission	Apr. 30	10:00 a.m.	Okemos-Conf. Room 3
Construction Code Commission	May 07	9:30 a.m.	Okemos-Conf. Room 3
Barrier Free Design Board	May 09	9:30 a.m.	Okemos-Suite 116 CR

Okemos - 2501 Woodlake Circle, Okemos

License Examination Schedule

EXAMINATION	DATE	LOCATION	DEADLINE
Boiler Installer and Repairer	Mar. 6/7	Okemos	Feb. 06
Boiler Special Inspector	Mar. 6/7	Okemos	Feb. 06
Mechanical Contractor	Mar. 12	Lansing	Feb. 12
Journeyman Electrician	Mar. 17/18	Okemos	Feb. 18
Master Electrician	Mar. 20	Okemos	Feb. 20
Elevator Contractor & Certificate-of-Competency	Mar. 21	Okemos	Mar. 01
Journey Plumber	Mar. 26	East Lansing	
Master Plumber	Mar. 26	East Lansing	
Journeyman Electrician	Mar. 28	Okemos	Feb. 18
Elevator Journeyperson Examination	Apr. 16	Okemos	Mar. 27
Master Electrician	May 22	Escanaba	Apr. 24
Journeyman Electrician	May 22	Escanaba	Apr. 24

Dates and locations are subject to change.

Rule 408.4027 ASME CSD-1 of the Boiler Act of 1965, PA 290

by Robert Aben, Chief
Boiler Division

Rule 408.4027 adopts the safety code, Controls and Safety Devices for Automatically Fired Boilers (CSD-1). It was adopted to standardize the assembly, maintenance, operation, and testing requirements of the safety controls of automatically fired boilers in Michigan.

The primary result of this code at the owner/user level is the requirement for the testing of these controls and devices. A listing of affected controls and devices would include such things as safety valves, pressure and temperature limits, low water fuel cut off devices (lwco) and gas train controls.

The rule requires the testing of lwcos and low-pressure safety valves on a monthly frequency and the testing of high-pressure safety valves, operating limits, high limits, and gas train controls on an annual frequency. A qualified individual must test the limits and gas train controls.

The owner/user must provide verification of the testing to the boiler inspector at the time of the certificate inspection. An acceptable method of verification would be a boiler log, properly completed, for those tests performed by the boiler operator and an invoice or letter of confirmation from the qualified individual that conducted the annual tests on the gas train and limits.

Questions may be directed to the Boiler Division at 517/241-9334.

Installation of Non-Metallic Sheathed Cable Splicing Devices for Manufactured Homes

by Stella Morris, Chief
Electrical Division

At the Construction Code Commission meeting held in September of last year, officials from a local unit of government presented information regarding several fires believed to have been caused by melted connectors.

The officials reported that upon arrival to one of the fire scenes, there was a smoke smell in the basement, but no sign of fire. After pulling back the insulation, arcing was detected at the interconnection of the connection modules. The connectors were presented to the Commission to determine if they were approved for the installation.

A follow-up investigation by the Plan Review Division with Tyco/Electronics, the manufacturer for the device [Amp Non-Metallic (Type NM-1) Sheathed Cable Splicing Device, Part No. 1116377], revealed specific manufacturer's instructions including, but not limited to the following:

1. Risk of electrical shock – do NOT use where directly exposed to water.
2. Do NOT re-terminate a splice if wire was previously inserted into contacts.
3. This kit must be installed and serviced by qualified electrical personnel.

Note: Article 545-13 of the 1999 NEC permits fittings and connectors to be concealed at the time of on-site assembly, where tested, identified and listed to applicable standards for on-site interconnections.

The connectors in question were listed for the installation, but the installer re-used the connectors and applied tape to seal the mating connections – clearly a violation of the listing and manufacturer's installation instructions.

Technical Bulletin Number 2 (Manufactured Home Installation Requirements) provides clarification on the completion of electrical installations (tie-in to the main panel and mating wiring) for single site (private) and community installations. A licensed electrical contractor is required to perform this work.

In summary, electrical inspectors and electrical contractors should be aware of the installation requirements for mating wiring relative to how it is installed. When a manufactured unit has been relocated, the mating electrical devices cannot be re-used unless listed for re-use. Otherwise, a junction box would be required for splicing the mating wires. A licensed electrical contractor must perform this work, as well.

Questions regarding electrical connections or inspections may be directed to the Electrical Division at 517/241-9320.

Editor's Correction

The Bureau Director's Column appearing in the November 2002 issue of the *Bulletin* contained an error.

The quote in the first paragraph citing the provisions of the Michigan Occupational Code should read "a heater or utility room, a crawl space, a basement, an attic, a garage, an open porch, a balcony, a terrace, a court, a deck, a bathroom, a toilet room, a closet, a hallway, a storage space, and other similar spaces not used for living, sleeping, eating, or cooking."

The Bureau regrets any inconvenience this may have caused.

Hoistway and Machine Fire Rating Requirements

by Calvin W. Rogler, Chief
Elevator Division

The Elevator Safety Division has received several calls regarding the fire rating required for an elevator hoistway and machine room. The American Society of Mechanical Engineers (ASME) A17.1 Safety Code for Elevators and Escalators, 1993 with the 1994 addenda, along with the Michigan Elevator Laws and Rules is the standard currently used for regulating these devices in Michigan. ASME A17.1, Section 100, Construction of Hoistways and Hoistway Enclosures, Rule 100.1a, Fire-Resistive Construction, refers the reader to the requirements of the building code. Section 101, Machine Rooms and Machinery Spaces, Rule 101.1a, Fire-Resistive Construction, also refers the reader back to the building code. The building code currently in use is the 2000 Michigan Building Code. Chapter 30 covers Elevators and Conveying Systems. Section 3002 of the Michigan Building Code addresses the requirements for hoistway enclosures which states, "...enclosures shall have a fire-resistance rating not less than that specified in Chapter 6 and shall be constructed in accordance with Chapter 7." Section 3006.4 covers machine rooms and states, "...spaces shall be enclosed with construction having a fire-resistance rating not less than the required rating of the hoistway enclosure served by the machinery."

The Michigan Building Code is the document that determines whether or not the elevator hoistway or machine room is required to be of fire-resistive construction and to what specifications. Questions relating to the necessary fire-resistive rating requirement for a particular hoistway or machine room should be directed to the enforcing agency (Building Official, Building Inspector) where the elevator is located.

Questions regarding enforcement of the elevator laws and rules may be directed to the Elevator Division at 517/241-9337.

New Web Address!

www.michigan.gov/bcc

Survey and Remonumentation Grants Available to Michigan's 83 Counties

by Maynard Dyer, Director
Office of Land Survey and Remonumentation

The Office of Land Survey and Remonumentation administers the State Survey and Remonumentation Act, PA 345 of 1990 and the applicable provisions of the Land Division Act, PA 288 of 1967.

Under the State Survey and Remonumentation Act, an annual grant is offered to each of Michigan's 83 counties to identify and preserve land survey records as well as to identify, mark and preserve the major survey corners across Michigan. All 83 counties are participating in the 2002 Survey and Remonumentation grant program.

The survey corners are generally located on a half-mile grid that covers nearly all of Michigan from the Ohio and Indiana borders on the south to Lake Superior and including Isle Royal on the north. This system of survey is called the Rectangular Survey System. Originally surveyed by the federal government beginning in the very early 1800s, Michigan surveys and corner markers were completed by 1855. The survey was made for the purpose of identifying specific properties for the United States to sell to private citizens. These same corners are used to identify the property that is bought and sold today.

The original corner markers were cedar posts cut and scribed by the survey crew as they carried out the survey. The cedar post corner markers are now over 150 years old and very few of the original posts remain today. Many of the cedar posts have been replaced over the years with different objects to mark the corner position. Records of the replacement of the corner markers tell the story of the surveyors who worked to preserve the corner positions and how they have been remarked or remonumented over the decades.

Land Corner Recordation Certificates prepared and recorded under PA 74 of 1970 describe all new survey markers that are set under the program and are on file in this office and at the individual county Register of Deeds' office. Copies are available at both offices.

To be eligible to receive a state grant for preserving land survey records and for remonumenting the property controlling corners in Michigan, a county must file a grant application on or before December 31st of the year preceding the year the grant is made. Grant applications are available from this office and are also available on the bureau's website at www.michigan.gov/bcc.

The Land Division Act provides for review and approval of all new subdivisions by several different approving authorities including the municipality, county and state. Additionally, the Land Division Act requires a copy of each recorded plat to be permanently filed and an index of those plats maintained by the state, as well as at the county Register of Deeds' office.

The Office of Land Survey and Remonumentation reviews all new plats for conformance with the provisions of the act and the rules applicable to new plats. Certification is made before a new plat is forwarded for recording to the county Register of Deeds' office, which is the last step in creating the subdivision.

After recording, the Register of Deeds' office provides the recording information to this office and at least 4 additional copies of the plat are certified as exact true copies and distributed. One copy is retained for the state's permanent file; one copy is sent to the county Treasurer; one copy to the municipality; and if the municipality is a township, one copy is sent to the county road commission, or if the municipality is a city one copy is sent to the city planning commission. The landowner or the land surveyor who prepared the plat may request additional certified copies.

The state's copy is housed at the Michigan Archives while microfilm or digital images are maintained in this office. Copies are available for a nominal fee and digital images of most plats are available on the bureau's website, free of charge. In addition to images of the plats, this office maintains a file of municipal resolutions, surveyor's affidavits and circuit court orders that alter or affect a plat in some way. Many of these documents are available as digital images online and may also be obtained at the county Register of Deeds' office.

Questions may be directed to the Office of Land Survey and Remonumentation at 517/241-6300.

Combustion Air

by Tennison B. Barry, Chief
Mechanical Division

The purpose of combustion air is to provide appliances enough oxygen for the complete combustion of fuel, dilution of flue gases, and ventilation of the equipment or appliance and the space in which it is installed.

If the installation is being done in a commercial building and the equipment is fueled by oil or solid fuel, refer to Chapter 7 of the 2000 Michigan Mechanical Code (MMC). Chapter 7 of the Michigan Mechanical Code must be reviewed to assure proper enforcement of combustion air requirements. Occasionally, installers do things that may not look familiar. Before rejecting the installation, inspectors may do one of two things: (1) Ask the installer which section of Chapter 7 the installation complies with; or (2) Review Chapter 7 to see if the installation is in compliance with any portion of the chapter. Do not assume the installation is in violation of the code without reviewing all facts and applicable code sections.

If the installation is being done in a commercial or residential building and the equipment is fueled by gas, refer to Chapter 3 of the 2000 International Fuel Gas Code (IFGC). This chapter is critical because there are differences between the IFGC, MMC, and the 2000 Michigan Residential Code (MRC).

An additional chapter regarding combustion air is Chapter 17 of the MRC. If the installation is being done in a residential building and the equipment is fueled by liquid or solid fuel, Chapter 17 will apply.

Questions may be directed to the Mechanical Division at 517-241-9325.

How to Contact the Bureau of Construction Codes

Mailing & Physical Addresses, Fax Numbers, Web Site Address, Telephone Numbers

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)
P.O. Box 30255 (Codes: permits, licenses, and other documents containing payment)
P.O. Box 30222 (Office of Local Government and Consumer Services)
P.O. Box 30704 (Subdivision Control/Survey and Remonumentation)
Lansing, Michigan 48909

Physical Addresses:

2501 Woodlake Circle, Okemos (Administration, Office of Administrative Services, Office of Management Services, Boiler, Building, Electrical, Elevator, Mechanical, Plan Review/Barrier Free Design, and Plumbing Divisions)
6546 Mercantile Way, Lansing (Office of Local Government and Consumer Services and Office of Land Survey and Remonumentation)

Fax Numbers:

Administration - (517) 241-9570
Codes – (517) 241-9308
Office of Local Government and Consumer Services – (517) 241-6371
Office of Land Survey and Remonumentation – (517) 241-6301

Web site: www.michigan.gov/bcc

Telephone Numbers:

Administration.....	517/241-9302
Office of Administrative Services (OAS)	517/335-2972
Office of Management Services (OMS)	517/241-9313
Boiler Division	517/241-9334
Building Division	517/241-9317
Electrical Division	517/241-9320
Elevator Division	517/241-9337
Office of Land Survey and Remonumentation (OLSR)	517/241-6300
Mechanical Division	517/241-9325
Office of Local Government and Consumer Services (OLGCS)	517/241-9347
Plan Review Division	517/241-9328
Plumbing Division	517/241-9330

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